

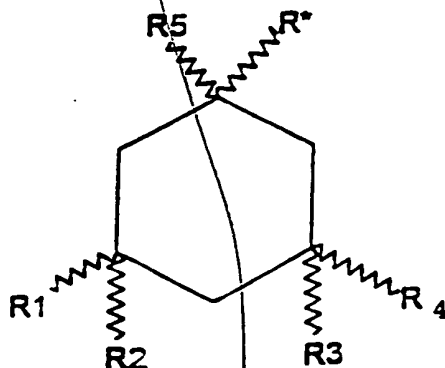
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We claim:

- 1 -

A method-of-treating a living animal for inhibition of progression or alleviation of a condition which is alleviated by a 5HT<sub>3</sub> or neuronal nicotinic receptor antagonist, comprising the step of administering to the said living animal an amount of a 1-aminoalkylcyclohexane compound selected from the group consisting of those of the formula



wherein R\* is  $-(CH_2)_n-(CR^6R^7)_m-NR^8R^9$

wherein  $n+m = 0, 1, \text{ or } 2$

wherein R<sup>1</sup> through R<sup>7</sup> are independently selected from the group consisting of hydrogen and lower-alkyl (1-6C),

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A method of Claim 3 wherein X is 4 or 5.

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A method of Claim 1 wherein the condition treated or inhibited is selected from the group consisting of emesis, anxiety disorders, schizophrenia, drug and alcohol abuse disorders, depressive disorders, cognitive disorders, Alzheimer's disease, cerebella tremor, Parkinson's disease, Tourette's, pain, and appetite disorders.

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A method of Claim 1 wherein the compound is selected from the group consisting of

1-Amino-1,3,3,5,5-pentamethylcyclohexane,  
1-Amino-1-propyl-3,3,5,5-tetramethylcyclohexane,  
1-Amino-1,3,3,5(trans)-tetramethylcyclohexane (axial amino group),  
1-Amino-1,3,5,5-tetramethyl-3-ethylcyclohexane (mixture of diastereomers),  
1-Amino-1,3,5-trimethylcyclohexane (mixture of diastereomers),  
1-Amino-1,3-dimethyl-3-propylcyclohexane (mixture of diastereomers),  
1-Amino-1,3 (trans),5 (trans)-trimethyl-3(cis)-propylcyclohexane,  
1-Amino-1,3-dimethyl-3-ethylcyclohexane,  
1-Amino-1,3,3-trimethylcyclohexane,  
1-Amino-1,3 (trans)-dimethylcyclohexane,  
1-Amino-1-methyl-3 (trans) propylcyclohexane,  
1-Amino-1-methyl-3 (trans) ethylcyclohexane,  
1-Amino-1,3,3-trimethyl-5 (cis) ethylcyclohexane,  
1-Amino-1,3,3-trimethyl-5 (trans) ethylcyclohexane,

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N-methyl-1-Amino-1,3,3,5,5-pentamethylcyclohexane,  
 1-Amino-1-methylcyclohexane,  
 N,N-dimethyl-1-amino-1,3,3,5,5-pentamethylcyclohexane,  
 1-Amino-1,5,5-trimethyl-3(cis)-isopropyl-cyclohexane,  
 1-Amino-1,5,5-trimethyl-3(trans)-isopropyl-cyclohexane,  
 1-Amino-1-methyl-3(cis)-ethyl-cyclohexane,  
 1-Amino-1-methyl-3(cis)-methyl-cyclohexane,  
 1-Amino-5,5-diethyl-1,3,3-trimethyl-cyclohexane, and  
 N-(1,3,3,5,5-pentamethylcyclohexyl) pyrrolidine,  
 and optical isomers, enantiomers, hydrates and  
 pharmaceutically-acceptable salts of any of the  
 foregoing.

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A method of Claim 1 wherein the compound is adminis-  
 tered in the form of a pharmaceutical composition thereof  
 comprising the compound in combination with one or more  
 pharmaceutically-acceptable diluents, excipients, or  
 carriers.

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A method of Claim 15 wherein the compound is  
 administered in the form of a pharmaceutical composition  
 thereof comprising the compound in combination with one  
 or more pharmaceutically-acceptable diluents, excipients,  
 or carriers.

A chemical structure of a cyclohexane ring with five substituents. The substituents are labeled R1, R2, R3, R4, and R5. R1 and R2 are on the left side of the ring, R3 and R4 are on the right side, and R5 is at the top. Each substituent is connected to the ring by a wavy line.

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and lower

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Use of Claim 18 wherein x is 4 or 5.

Use of Claim 19 wherein x is 4 or 5.

Use of Claim 18 wherein the compound is selected from the group consisting of

1-Amino-1-propyl-3,3,5,5-tetramethylcyclohexane,

1-Amino-1,3,3,5(trans)-tetramethylcyclohexane (axial amino group),

1-Amino-1,3,5,5-tetramethyl-3-ethylcyclohexane (mixture of diastereomers),

1-Amino-1,3,5-trimethylcyclohexane (mixture of diastereomers),

1-Amino-1,3-dimethyl-3-propylcyclohexane (mixture of diastereomers),

1-Amino-1,3 (trans),5 (trans)-trimethyl-3(cis)-propylcyclohexane,

1-Amino-1,3-dimethyl-3-ethylcyclohexane,

1-Amino-1,3,3-trimethylcyclohexane,

1-Amino-1,3 (trans)-dimethylcyclohexane,

1-Amino-1-methyl-3 (trans) propylcyclohexane,

1-Amino-1-methyl-3 (trans) ethylcyclohexane,

1-Amino-1,3,3-trimethyl-5 (cis) ethylcyclohexane,

1-Amino-1,3,3-trimethyl-5 (trans) ethylcyclohexane,

N-methyl-1-Amino-1,3,3,5,5-pentamethylcyclohexane,

1-Amino-1-methylcyclohexane,

N,N-dimethyl-1-amino-1,3,3,5,5-pentamethylcyclohexane,

1-Amino-1,5,5-trimethyl-3(cis)-isopropyl-cyclohexane,

$\{ \mathbf{h}_i^{\text{pre}} \}_{i=1}^n$  are pre-processed inputs,  $\{ \mathbf{h}_i^{\text{post}} \}_{i=1}^n$  are post-processed outputs,  $\mathbf{h}_i^{\text{pre}}$  and  $\mathbf{h}_i^{\text{post}}$  are the inputs and outputs of the  $i$ -th layer, respectively. The pre-processed inputs  $\mathbf{h}_i^{\text{pre}}$  are obtained by applying the pre-processor  $\mathcal{P}$  to the inputs  $\mathbf{h}_i$ . The post-processed outputs  $\mathbf{h}_i^{\text{post}}$  are obtained by applying the post-processor  $\mathcal{Q}$  to the outputs  $\mathbf{h}_i$ . The pre-processor  $\mathcal{P}$  and the post-processor  $\mathcal{Q}$  are both linear transformations. The pre-processor  $\mathcal{P}$  is defined as  $\mathbf{h}_i^{\text{pre}} = \mathcal{P}(\mathbf{h}_i)$  and the post-processor  $\mathcal{Q}$  is defined as  $\mathbf{h}_i^{\text{post}} = \mathcal{Q}(\mathbf{h}_i)$ . The pre-processor  $\mathcal{P}$  and the post-processor  $\mathcal{Q}$  are both linear transformations. The pre-processor  $\mathcal{P}$  is defined as  $\mathbf{h}_i^{\text{pre}} = \mathcal{P}(\mathbf{h}_i)$  and the post-processor  $\mathcal{Q}$  is defined as  $\mathbf{h}_i^{\text{post}} = \mathcal{Q}(\mathbf{h}_i)$ .

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